IMPROVING SALESPERSON EFFECTIVENESS THROUGH SALES FORCES AUTOMATION TOOLS IN WHOLESALE DISTRIBUTION FIRMS

Albana Berisha Qehaja [1]***, Enver Kutllovci*** [2] **&** ***Mihane Berisha Namani*** [3]

UDC / UDK: 658.8-051:005.591.6](497.115)
JEL classification / JEL klasifikacija: O14, O15, L22, L24, J24
Review / Pregledni rad
Received / Primljeno: March 7, 2016 / 7. ožujka 2016.
Accepted for publishing / Prihvaćeno za tisak: May 30, 2016 / 30. svibnja 2016.

Summary

The main purpose of this paper is to contribute to the discussion of whether the effectiveness of salespeople is improved through sales force automation tools. A survey was carried out in three local firms in the Republic of Kosovo, dealing with the distribution of FMCG (fast-moving consumer goods). Survey data were collected from 58 employees in local firms "X", "Y", and "Z. This topic was chosen for research because FMCG wholesale distribution firms in Kosovo are undergoing transition with regard to the use of specialized information technologies such as the introduction of handheld computers, also known as Personal Digital Assistants - PDAs. Some firms started to use these advanced technological tools in the daily course of their operations a little earlier, and some a little later. However, there are also some firms that have not made any changes yet to make progress and step away from their traditional approach. It is proposed that FMCG wholesale distribution firms that have adopted sales force automation tools, have more effective salespeople as compared to firms that operate through the traditional approach - no handheld computers, no vehicle surveillance systems etc. The results of the empirical study are consistent with the three hypotheses proposed in the paper.

Key words: *salesperson effectiveness, sales force automation (SFA) tools, performance, wholesale distribution firm, Kosovo.*

[1] Albana Berisha Qehaja, Ph. D. can., Teaching Assistant, Faculty of Economics, University of Prishtina, E-mail: albana.berisha@uni-pr.edu
[2] Enver Kutllovci, Ph. D., Full Professor, Faculty of Economics, University of Prishtina, E-mail: enver.kutllovi@uni-pr.edu
[3] Mihane Berisha Namani, Ph. D., Full Professor, Faculty of Economics, University of Prishtina, E-mail: mihane.berisha@uni-pr.edu

1. INTRODUCTION

Information age is characterized as much by workers and employment practices as it is by hardware and software (Brynjolfsson and Saunders, 2010). Thus, today no one can think of management without an information system. According to Zigmund (2000), the wealth of firms in the 21st century is dependent on world economy information and global competitiveness.

The importance of the information and communication age is increasing with the launch of specialized technological tools that are involved in various work processes by facilitating and accelerating them, allowing for less errors and enabling access to real time information. Thus, information technologies (hereinafter often abbreviated IT) have become indispensable in almost all spheres of life including office work. Different authors have used wide concepts to define information technology. Apart from hardware (hardware – solid part, tangible) and software (software – soft part, intangible), Kling (1980) also alluded to a host of other factors. Information technology in the broadest sense refers to any technological tool controlled by a microprocessor (computer chip). It is evident that work processes are facilitated and accelerated by IT. However, discussions continue about the issue of use/non-use of appropriate IT devices in the workplace.

According to Barker *et al*., (2009): "*Sales force automation (SFA) is the use of software to automate sales tasks, including sales activities, order processing, customer management, sales forecasting and analysis, sales force management, and information sharing*". Sales force automation (hereinafter often referred as SFA) tools are used in a sales force automation system. Morgan and Inks (2001) pointed out that these technologies include "*the use of computer hardware, software and telecommunications devices by sales people in their selling and/or administration activities*." How these tools affect salesperson effectiveness and the firm's performance has been and still remains a topic of discussion among academics, researchers and experts in relevant fields.

Many studies have come to the conclusion that SFA tools not only have an impact on improving salesperson effectiveness, but are also associated with increased profitability, reorganization of work and many other benefits. According to Mathieu *et al.,* (2007) a salesperson's performance is closely associated with the performance of the SFA solution rather than their personal sales achievements. In the last two decades, sales departments have increasingly implemented sales force automation (SFA) tools to facilitate the customer relationship management processes (Speier and Venkatesh, 2002). Worldwide spending on SFA tools has grown at an annual rate of 27% to reach $3.2 billion in 2007 (Kanaracus, 2008) and was forecast to reach almost $9 billion in 2012 (Wailgum, 2008). Siebel and Malone (1996) emphasized that SFA tools require a high level of investment.

There are some burning questions on the topic. Do fast-moving consumer goods (hereinafter abbreviated as FMCG) wholesale distribution firms have appropriate sales force tools to function appropriately, efficiently and successfully? Does salesperson effectiveness improve through SFA tools in the workplace? Is there a need for work reorganization if SFA tools are adopted? Will the work processes be facilitated, level of errors

reduced, or will the speed of accessing information increase through the use of SFA tools? The rest of this paper attempts to answer these and many other related questions.

The main objective of this empirical study is to investigate and analyze the degree of improvement of salesperson effectiveness through SFA tools in Kosovo FMCG wholesale distribution firms, or to see if there is any improvement at all. More specifically, it investigates the use/non-use of PDAs in the sales process and its impact on salesperson effectiveness. Other relevant objectives relate to the assumptions set out below and include research on the possibility of SFA tools to influence sales growth, cost reduction, improvement of effectiveness and work reorganization as measured by several factors such as facilitation and acceleration of work processes, reduction of errors, accuracy of real time information, etc.

The impact of sales force automation tools on salesperson effectiveness is a controversial topic and remains open to debate. Results of numerous studies in the past three decades indicate various data trends, some of which will be highlighted in the second chapter of the literature review.

2. LITERATURE REVIEW

At the business process level, performance can be measured by observing whether goods are loaded on time (McAfee, 2002), by determining customer satisfaction (Devaraj and Kohli, 2000) and by measuring the turnover of stock (Barua *et al.,* 1995). On the other hand, at the firm level, performance measurement has to do with the total measurement of performance of all the firm's activities such as cost reduction, increased productivity, increased revenue and competitive advantage. Results of several studies indicate that adoption of IT has an impact on the performance of the organization (Daveri, 2000; Pohjola, 2001; Kraemer and Dedrick, 1994, 2001; etc.), while others have found no significant link between IT and performance (Banker and Kauffman, 1988; Neo, 1988; Wooldridge and Floyd 1990; Strassman, 1990; Zahra and Covin, 1993; Loveman, 1994; etc.). Quantitative empirical studies evaluate the impact of information technology on work processes, business units, firms, industries and various places (Alpar and Kim 1990; Dewan and Kraemer 2000). With the expansion of strategic management, strategy researchers and practitioners have an increased interest in the role of IT in strategy formulation and implementation and its impact on financial performance (Sabherwal and King, 1991; Holland *et al.*, 1992; Henderson and Venkatraman, 1993; Kettinger *et al.*, 1994).

Meanwhile, there is a dilemma emerging from these study results: Is it worth investing in specialized information technologies, as investments in these types of technologies usually require more funds? Skeptics pointed out that heavy IT investment had occurred concurrently with the productivity slowdown that began in 1973 in the U.S. This so-called *productivity paradox* stimulated economists, management scientists, and information systems researchers to conduct more rigorous scientific analyses of the relationship between IT and productivity (Dedrick *et al.,* 2003). IT proponents argued that it takes time and a critical mass of IT investments to provide benefits. Subriana *et al.,*

(2003) created a methodology to assess the impact of IT on the performance of business processes. With all the discussions and controversies about the impact or non-impact of IT on a firm's performance and salesperson effectiveness, many researchers, consultants, and IT managers unanimously asserted that firms should integrate IT in overall strategic planning (Porter and Millar, 1985; Rackoff *et al*., 1985; Bakos and Treacy, 1986; Clemons and Row, 1991; Holland *et al*., 1992).

Exploring the impact of SFA tools on work reorganization and salesperson effectiveness is not a widely studied topic. There is a lack of empirical studies on the use of SFA and its effects on company performance. There are several authors who have written about the effects of SFA on company performance (Keillor *et al*., 1997; Rivers and Dart, 1999; Engle and Barnes, 2000; Erffmeyer and Johnson, 2001; Speier and Venkatesh, 2002; Rodina *et al*., 2003; Walker and Barnes, 2005; Gohamann *et al*., 2005; Robinson *et al*., 2005; Brown and Jones, 2005; Rouzies *et al*., 2005, Ahearne *et al.,* 2005; Barnes *et al*., 2006; Cascio *et al*., 2010). According to Scornavacca *et al.* (2013) the fast moving consumer goods (FMCG) industry is particularly well suited to gain from the potential benefits of mobile SFA.

According to Rivers and Dart (1999) only in the late 1990s did organizations begin investing significantly in automation of sales and marketing functions. Also, it should be mentioned that these authors investigated the factors relating to the adoption of SFA systems among mid-sized Canadian manufacturers. Some researchers have studied factors leading to sales force automation use (Jones *et al*., 2002). Others have studied the effects of sales efficiency after SFA adoption (Erffmeyer and Johnson 2001, Ahearne *et al*., 2005, Cascio *et al*., 2010 etc.). Most existing researches consider the relationship between sales performance and SFA use (Robinson *et al*., 2005). According to Keillor *et al.* (1997), 79.8 percent of firms interviewed in an operational field reported that SFA has increased salesperson productivity. Also, other authors have pointed out that wireless technologies have a significant potential to help organizations in achieving the optimization of field service efficiency, productivity, quality, and effectiveness. (Engle and Barnes, 2000; Effmeyer and Johnson, 2001; Rodina *et al*., 2003). SFA can facilitate faster communication of information between salespeople and organizational systems, resulting in increased efficiency and faster turnaround in the sales process (Engle and Barnes, 2000; Erffmeyer and Johnson, 2001). Walker and Barnes (2005) have examined the impact of wireless sales force technologies on three case study organizations in the New Zealand food industry. As a result of applying wireless technologies to their sales function, the three cases studied all experienced impacts that have led to improvements in sales force and overall organizational performance. So, the importance of successful SFA adoption is highlighted through its effect on both SFA implementation and overall firm performance (Cascio *et al*., 2010).

Some authors have been focused on studying the benefits from SFA systems and tools. Verity (1993) identified several benefits from SFA, including the reduction of errors common for manual sales processing, reduced support costs, improved close rates, and an increase in average selling price through more accurate and timely pricing information. According to Schafer (1997), when adoption is successful, the use of SFA tools can help increase sales by 15 to 35%. SFA solutions have the potential of improving the

accuracy of information being gathered and communicated (Erffmeyer and Johnson, 2001). Engle and Barnes (2000) conducted a research on sales force automation usage and its effectiveness and cost-benefit. They surveyed 1,641 sales representatives from pharmaceutical companies in three countries: Germany, US and UK. General findings indicated that management and representatives believed SFA to be useful. Also, according to them, sales force automation has the potential to produce several benefits for organizations, with improved effectiveness of the sales effort as the primary goal. Ahearne *et al*. (2005) argued that by saving time and optimizing call schedules, greater use of technology enables salespeople to increase their number of sales calls; their cross-sectional research also provides evidence of the moderating effect of user support in the relationships between SFA use and both sales effectiveness and efficiency, as well as a similar effect of user training on sales effectiveness. Barnes *et al*. (2006) found that wireless technologies can significantly enhance the benefits of traditional field force automation. SFA systems provide organizations with several compelling benefits; the most important among these are the automation of the sales office, standardization of sales processes, seamless integration with the enterprise information system, and more effective management of the sales force (Barker *et al.,* 2009). Cascio *et al*., (2010) conducted an empirical investigation of the impact of management commitment on adoption of sales force automation technologies by salespeople, and their results showed that commitment from both leadership levels (perfect alignment) was the most conducive to SFA adoption, while misaligned commitment conditions had differential effects on adoption. Specifically, even when supervisors were committed to sales technology, lack of top management commitment could hurt SFA adoption.

Results of various research have also indicated that in the process of SFA implementation, resistance to change is a major roadblock to successful adoption of new technologies. Research of information technology adoption in general (Venkatesh *et al*., 2003) and SFA adoption in particular (Schafer, 1997; Gohmann *et al*., 2005) pointed out the lack of user acceptance as the leading cause of information system failures. Speier and Venkatesh (2002) collected data from 454 salespersons across two firms that had implemented SFA tools. They found out that six months after implementation, the technology had been widely rejected. Also, they found that absenteeism and voluntary turnovers had significantly increased. According to Barker *et al.,* (2009) "*one of the main determinants of SFA success is user acceptance of the technology, which requires acceptance of a change*".

PDA is an abbreviation of ***P****ersonal* ***D****igital* ***A****ssistant* which means personal digital computer. It is a piece of electronic equipment that is enriched with computer, phone/fax, internet and other network features. According to Golden and Geisler (2007) "*When Palm Technologies introduced its prototypical PDA, the Palm Pilot, in mid-1996, it became widely recognized as one of most successful consumer product launches in history*". The PDA sector has seen solid growth over the last few years (Quan, 2003). According to a study conducted by Coughlan and Breslin (2003), mobile handheld computers are providing higher employee productivity and improved customer service levels in a wide variety of industries and sectors. In addition, results from the same study explain that "*the investment in the system of purchase orders with the PDA's network of retail is*

1/5 as compared to the investment in the system without PDA". Brynjolfsson and Hitt (2000) rightly emphasised that: *As computers become cheaper and more powerful, the business value of computers is limited less by computational capability and more by the ability of managers to invent new processes, procedures and organizational structures that leverage this capability.* According to Dewett and Jones (2001), "*IT produces many efficiencies in communication, including the ability to communicate more easily and less expensively across time and geographic location; the ability to communicate more rapidly and with greater precision to targeted groups; the ability to record and index more reliably, and inexpensively the context and nature of communication events; and the ability to more selectively control access and participation in a communication event or network*". Henderson and Venkatraman (1994) noted two features of IT that directly address the issue of effectiveness. First, IT offers dramatic increases in the speed of communication, with high volumes of data moving from one location to another at rates unimaginable even a few years ago. Second, IT dramatically reduces the costs of communication due to advances in computer and telecommunication technology that lead to economies of scale and scope. According to Fafchamps *et al.,* (2012), the increasing availability and affordability of computerized data collection through the use of PDAs, Ultra-Mobile Personal Computers (UMPCs), and other such hardware offers one potential new avenue for improving the quality of measurement of microenterprise performance.

Advanced wholesale distribution firms are fully based on the SFA system, which enables online orders and timely preparation of invoices. The PDAs have applications for sales management installed, which are part of the overall strategy. It is a big advantage to have sales, stock and financial value data in real time.

3. METHODOLOGY

This study is based on primary data collected through a quantitative survey, investigating the improvement of salesperson effectiveness through SFA tools and the reorganization of work among FMCG wholesale distribution firms in Kosovo. The main methods used to address this issue were: analysis, synthesis, and comparative method. Three FMCG wholesale distribution firms (medium sized companies, 50-250 employees) in Kosovo were chosen with different levels of SFA system development at that time. Firm "X" was categorized as a medium firm regarding SFA system development in the work processes (started using PDAs three years ago), firm "Y" was an advanced firm regarding the implementation of SFA tools in the workplace (started using PDAs seven years previously) and the third firm "Z" had not yet invested in the system of orders and online sales through PDAs.

The nature of this research is empirical. Sampling was pre-selected by using the non-probability method. Survey respondents were sales managers, financial officers, sales representatives, direct sellers, supervisors and IT administrators. In the firm "X", the total of 44 employees were surveyed and in the firm "Y" 13 employees were surveyed. The respondents were selected from departments that were affected by the change in the working processes, namely the transition to online ordering of goods through PDAs. As regards the firm "Z", which had not invested yet in an SFA system, one of its owners was surveyed. So the total sample size for the study was 58. It can be said that about 45 per-

cent of the total number of employees working in the surveyed firms participated in this study. The questionnaire consisted of 28 questions. Depending on the respondents' answers, the number of answers varied, since a negative answer to a question could bypass some other questions. The average time to complete the questionnaire was 15 minutes. During a meeting, the respondents were presented with the study aims and methods to be used. The surveys were conducted with persons who work directly with PDAs as the main tool in the SFA system. The process was mostly trying to survey employees with several years of experience in the firm because they had a better knowledge of the advantages and shortcomings of working with and without PDAs. Respondents were guaranteed that the data would remain confidential and were assured that they would be used for this study only. During the data analysis, descriptive and logical analysis was used and responses were processed and interpreted objectively.

Out of 100 percent of respondents, 93.10 percent were males and 6.90 percent were females. This disparity in the gender structure of the respondents can be explained by the fact that mainly men are involved in the selling process in FMCG wholesale distribution firms due to the perceived nature of the work. The average age of respondents was 35 years. Their qualifications were as follows: none of the respondents were with primary education only, 50.00 percent of respondents were with secondary education, 36.21 percent with higher education and 13.79 percent with university education. Also, 10.34 percent of them worked in the respective firm less than 1 year, 44.83 percent of them worked in the respective firm for 1-5 years, 32.76 percent of them for 6-9 years and 12.07 percent of them worked for more than 9 years in the firm. It is worth mentioning that in the firm "Y", 100 percent of employees worked there for 6-9 years and it coincided with the beginning of using SFA tools 7 years previously. From this fact, it was concluded that employee turnover in the firm was low or absent. Regarding the size of the firms, all of them fell into the category of medium sized firms, with 50-250 employees. In all of the surveyed firms, 100 percent of the respondents worked full time. 50.87 percent of respondents of the surveyed firms were already using sales force automation technologies, namely PDAs, while 49.13 percent of them were employed at the time of transition when the SFA system was implemented.

4. RESEARCH RESULTS

In this section, detailed results of this empirical study are presented. The main hypotheses investigate whether salesperson effectiveness is improved through the usage of SFA tools.

4.1 Research results related to the first hypothesis

H_1: *The use of SFA tools leads to work reorganization and salesperson effectiveness in FMCG wholesale distribution firms in Kosovo.*

H_0: *The use of SFA tools does not lead to work reorganization and salesperson effectiveness in FMCG wholesale distribution firms in Kosovo.*

The following table shows how respondents from surveyed firms described their work with and without PDAs. They described the weaknesses of work without PDAs, as well as the advantages of PDAs. The answers of firms "X" and "Y" which were the same are presented in italic.

Table 1: Advantages and weaknesses with and without PDAs

Description	Firm "X"	Firm "Y"	Firm "Z"
Weaknesses of not using PDAs	Constrained capacities Delays in deliveries Low data accuracy of inventory, payments, sales, deliveries etc. Lack of knowledge of existing stock in warehouse Uncontrolled returns of goods Lack of barcode memorization leading to errors and omissions No real-time access to information Harder work Longer work process Delayed financial reconciliation	Delays in deliveries Low data accuracy of inventory, payments, sales, deliveries etc. Lack of knowledge of existing stock in warehouse No real-time access to information Harder work Longer work process	Do not think they have any weaknesses
Advantages from using PDAs	Sending online orders (sales representatives) Access to current stock at any time Easier registration of goods Faster information on daily turnover Easier working process Financial Reconciliation anytime More efficient way to work Better time management Increased level of supplier reliability Quicker access to information Reduced level of errors etc.	Sending online orders (sales representatives) Access to current stock at any time Easier working process More efficient way to work Better time management Quicker access to information Reduced level of errors etc.	Do not see any great competitive advantage

Source: Authors

When respondents were asked *whether they think that the firm had achieved its target objective of increasing salesperson effectiveness through sales force automation system tools*, almost all respondents from firms "X" and "Y" gave a positive answer, while the respondent from firm "Z" believed that their salesperson effectiveness was at an appropriate level without using SFA tools. Detailed comments are below.

Firm "X": 54.54 percent of respondents thought that the firm had achieved excellent results and increased salesperson effectiveness through SFA tools; 34.09 percent thought that the firm had managed very well the effect of increasing work effectiveness; 6.82 thought it had reached the goal to a moderate extent, while 4.55 percent of them thought that the firm had not achieved this goal at all. **Firm "Y":** 100 percent of respondents thought that the firm had achieved the goal of increasing salesperson effectiveness at work through SFA tools in an excellent way.

When they were asked *which of the sales force automation tools had affected most or least the increased work effectiveness,* over 86.36 percent of respondents from the firm

"X" thought that the introduction of PDAs had been extremely influential on work effectiveness, and 9.09 percent thought that PDAs had been very influential on work effectiveness, while 4.55 percent of them thought that it had been somewhat influential on work effectiveness.

20.45 percent of employees thought that *vehicle fleet monitoring* had been extremely influential on work effectiveness; 20.45 percent of them thought that it had been very influential; 4.55 percent of them thought it had been somewhat influential; 4.55 percent of them thought it had been slightly influential; 15.91 percent of them thought it had not been influential at all and 34.09 percent of them did not answer, abstained from commenting.

Only 29.54 percent of respondents thought that *points of sale scanning* in the territory of Kosovo had been extremely influential to increased work effectiveness; 15.91 percent of them thought it had been somewhat influential; 9.09 percent thought it had been slightly influential; 13.64 percent of them thought it had not been influential at all and 31.82 percent did not give any answer. All respondents from firm "Y" thought that the introduction of PDAs had mostly influenced increased work effectiveness. None of them appreciated the *online vehicle monitoring system* or *scanning of sales points* throughout Kosovo. Summarized results are shown in Table 2.

Table 2: Types of SFA tools that have influenced mostly work effectiveness, expressed in percentage (%)

Type of SFA tool	Firm "X"							Firm "Y"		
Ranking	1	2	3	4	5	Na	Total	1	4-5	Total
1-not at all influential and 5-extremely influential	Not at all influential	Slightly influential	Somewhat influential	Very influential	Extremely influential	No answer		Not at all influential	Very and extremely influential	
Personal Digital Assistant-PDA	/	/	5	9	86	/	100	/	100	100
GPS-Vehicle Fleet Monitoring	16	5	5	20	20	34	100	/	/	/
Scanning of point of sales in the whole territory of Kosovo	14	9	16	/	30	32	100	/	/	/

Source: Authors

In sum, 100 percent of respondents from both firms "X" and "Y" believed that the use of PDAs was very important for work effectiveness. Regarding their opinion on how the use of SFA tools had affected the reorganization of work, 65.91 percent of respondents from firm X thought that it had had a major effect and 34.09 percent of them thought that it had had a moderate effect. All respondents from firm "Y" responded that it had had a major effect. None of the respondents of both firms responded negatively to the impact of SFA tools on work reorganisation. Out of 100 percent of respondents, 98.25 percent thought that work was more efficient with an SFA system and they did not want to go back to the previous work system. Only 1.75 percent of them thought that

there was no benefit from the SFA system and they would have been happy to return to the previous system.

Therefore, based on the above results, it can be concluded that the first hypothesis is proved, that *the use of SFA tools leads to work reorganization and salesperson effectiveness in FMCG wholesale distribution firms in Kosovo.*

4.2 Research results related to the second hypothesis

H_2: *Using sales force automation tools in the right workplace leads to increased sales and reduced costs.*

H_0: *Using sales force automation tools in the right workplace does not lead to increased sales and reduced costs.*

Tables 3 and 4 and Charts 1 and 2 present the results regarding the impact of SFA tools on sales growth and cost reduction.

Table 3: Impact of SFA tools on sales growth, expressed as percentage (%)

Answer	Firm "X"	Firm "Y"	Total
Has an impact	80	92	83
Has no impact	16	8	14
No answer	4	/	3
Total	100	100	100

Chart 1: Impact of SFA tools on sales growth, expressed as percentage (%)

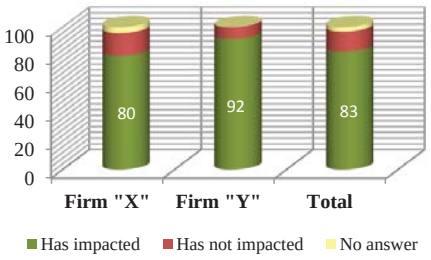
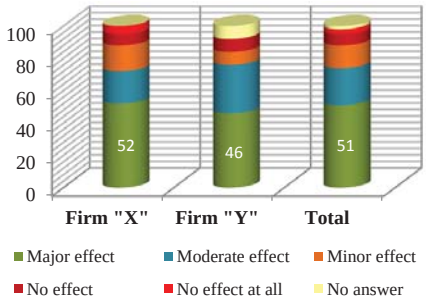


Table 4: Impact of SFA tools on cost reduction, expressed in percentage (%)

Answer	Firm "X"	Firm "Y"	Total
1-No effect at all	5	/	3
2-No effect	7	8	7
3-Minor effect	16	8	14
4-Moderate effect	20	30	23
5-Major effect	52	46	51
No answer	/	8	2
Total	100	100	100

Source: Authors

Chart 2: Impact of SFA tools on cost reduction, expressed as percentage (%)



Based on the above results, it can be concluded that in general the second hypothesis is confirmed, and the *use of sales force automation tools in the right workplace*

leads to increased sales and reduced costs. However, it should be noted that the confirmation that the use of SFA tools in the right workplace affects sales growth is significantly more convincing than evidence that the use of SFA tools in the right workplace affects cost reduction.

4.3. Research results related to the third hypothesis

H_3: *Sales force automation system, based on PDAs leads to improved effectiveness and work reorganization (facilitates and accelerates the work process, reduces errors, provides accurate real time information).*

H_0: *Sales force automation system, based on PDAs does not lead to improved effectiveness and work reorganization (facilitates and accelerates the work process, reduces errors, provides accurate real time information).*

There was a variety of questions in the questionnaire regarding the impact of SFA tools on effectiveness and work reorganization expressed through many factors.

Results from firm "X": Out of 100 percent of respondents from firm "X", 59.09 percent of them thought that the use of SFA tools had been extremely influential on *improved work effectiveness*, 31.82 percent of them thought they had been slightly influential and 9.09 percent of them thought they had been somewhat influential. Also, 47.72 percent of them thought that the use of SFA tools had been extremely influential on *shortening the duration of work completion*; 29.55 percent thought they had been very influential; 9.09 percent thought they had been somewhat influential; 9.09 percent thought they had been slightly influential while 4.55 percent thought they had not been influential at all.

Out of the total of respondents, 68.18 percent of them thought that the use of SFA tools had had a major effect on *reducing the level of errors*, 9.09 percent of them thought they had had moderate effects; 9.09 percent thought they had been neutral; 4.55 percent of them thought they had had a minor effect and 9.09 percent thought they had had no effect at all. Regarding their opinion on the impact of SFA tools on the *accuracy of stock information at any time,* 72.73 percent of them said they had had major effect; 9.09 percent thought they had had moderate effects; 18.18 percent of them thought they were neutral.

In addition, out of the total of respondents, 72.73 percent of respondents from firm "X" thought the use of SFA tools had been extremely influential on *financial reconciliation at any time*; 9.09 percent thought they had been very influential; 9.09 percent thought they had been somewhat influential and 9.09 percent thought they had been slightly influential. Pertaining to the effect of SFA tools on *real time information*, 63.63 percent of them thought they had had a major effect; 15.91 percent of them thought they had had moderate effects; 15.91 percent of them thought they had been neutral and 4.55 percent of them thought they had had a minor effect. Out of 100 percent of respondents in the firm "X", 63.64 percent thought that SFA tools had helped in a major way to *deliver goods faster*; 20.45 percent of them thought they had been very helpful; 9.09 percent thought they had been helpful and 6.82 percent thought they had not helped at all.

Results from firm "Y": 61.54 percent thought SFA tools had been extremely influential on *shortening the duration of work* completion; 38.46 percent of them thought they had been very influential. Also, 76.92 percent of respondents thought the use of SFA tools had been extremely influential to *improved work effectiveness* and *reducing the level of errors*, 23.08 percent of them thought that they had been very influential to improved work effectiveness and reduced level of errors. All respondents from firm "Y" thought the use of SFA tools had had a major effect on *accuracy of stock at any time*, *financial reconciliation at any time* and on *real time information*. In addition, out of the total of respondents from firm "Y", 84.62 percent thought SFA tools had helped in a major way to deliver goods faster; 7.69 percent thought they had been very helpful and 7.69 percent thought they had not helped at all.

In the table below the summarized results of the firms "X" and "Y" are presented.

Table 5: The impact of using SFA tools in work effectiveness and reorganization expressed as percentage (%)

Ranking	1	2	3	4	5	Na	Total
1- not at all and 5- extremely influential	Not at all influential	Slightly influential	Somewhat influential	Very influential	Extremely influential	No answer	
Improving work effectiveness	/	/	5	27	68	/	100
Shortening the duration of work completion	2	5	5	34	54	/	100
Reducing the level of errors	5	2	5	16	72	/	100
Accuracy of stock information at any time	/	/	9	5	86	/	100
Financial Reconciliation at any time	/	5	5	5	85	/	100
Real time information	/	2	8	8	82	/	100
Faster delivery of goods	/	7	5	14	74	/	100

Source: Authors

Results from firm "X": Out of 100 percent of respondents, 77.27 percent of them answered that SFA tools had had a mayor influence on *time-saving*; 6.82 percent of them thought they had had a strong influence; 2.27 percent thought they had had a good influence; 6.82 percent of them thought they had had a fair influence; 2.27 percent thought they had had a poor influence and 4.55 percent did not answer.

From all the respondents of firm "X", 52.27 percent of them answered that SFA tools had had a major effect on *the accuracy of information*; 15.91 percent thought they had had a moderate effect; 4.55 percent of them thought they were neutral; 6.82 percent of them thought they had had a minor effect; 9.09 percent of them thought they had had no effect and 11.36 percent abstained from commenting.

From 100 percent of respondents, 79.54 percent of them responded that SFA tools had had a major effect on *facilitating the work process*; 13.64 percent of them thought they had had a moderate effect; 6.82 percent thought they had been neutral.

As regards the impact of SFA tools on *increasing work capacities,* 31.82 percent of them responded they had been extremely influential to work capacity; 13.64 percent thought they had been very influential; 6.82 percent thought they had been somewhat influential; 11.36 percent thought they had been slightly influential; 15.91 percent of them thought they had not been influential at all and 20.45 percent of them abstained from answering. Out of 100 percent of the respondents of firm "X", only 2.27 percent thought the SFA tools had not contributed in any way. Results are aggregated in Table 6.

Results from firm "Y": Out of all respondents, 69.24 percent of them saw a major contribution of SFA tools to *time-saving*, 7.69 percent of them thought they had had a strong influence; 7.69 percent of them thought they had had a good influence; 15.38 percent of them thought they had had a fair influence. While 61.54 percent of them responded that SFA tools had had a major effect on *the accuracy of information*; 23.08 percent thought they had had moderate effects; 7.69 percent thought they were neutral and 7.69 percent abstained from answering.

All (100 percent) respondents answered that SFA tools had had a major effect on *facilitating the process*. With regard to the impact on *increasing work capacity*, 15.39 percent of respondents answered that SFA tools had been extremely influential on work capacity; 38.46 percent of them said they had been very influential; 7.69 percent thought it had had no influence at all and 38.46 percent of them abstained from answering. Out of 100 percent of respondents in the firm "Y", none of them think the SFA tools had not given any input on any aspect. The following table summarizes the results for firms firm "X" and "Y".

Table 6: The greatest contribution of SFA tools

Ranking	1	2	3	4	5	Na	Total
1-poor and 5-excellent	Poor	Fair	Good	Very good	Excellent	No answer	
Time-saving	1	11	5	7	74	2	100
Accuracy of information	5	3	6	19	57	10	100
Facilitation of the work process	/	/	3	7	90	/	100
Growth of work capacity	12	6	3	26	24	29	100
There is no contribution	1	/	/	/	99	/	100

Source: Authors

Based on the aggregated results, it can be concluded that the third hypothesis is proved, the *SFA system, based on PDAs leads to improved effectiveness and work reorganization* (facilitates and accelerates the work process, reduces errors, provides accurate real-time information).

Out of all the respondents of firms "X" and "Y", 82.45 percent of them said they had encountered "few" problems during implementation, only 3.51 percent of them said they had encountered "many" problems and 14.04 percent of them said that they had not encountered any problems.

Regarding the progress of project implementation, none of the respondents of firms "X" and "Y" thought that implementation of the project had been slow; 40.35 percent of them thought it had been very fast; 31.58 percent thought it had not been fast and 28.07 percent of them thought it had been not too fast. 78.95 percent of all respondents thought the project was not completed and needed change, while 21.05 percent of them thought the project was completed and there was no need for further change. Regarding their opinion on whether the use of SFA tools influenced the *improvement of the firm's image*, 85.96 percent of them thought it had had a strong influence on firm's image and 14.04 percent of them thought it had had an average influence, while none of them thought that there had been no influence at all.

5. DISCUSSION AND CONCLUSION

The nature of a firm's work is ever changing as the result of advanced information technologies, which enables access to information and timely reaction in the event of any necessary work. With the development of specialized and advanced SFA tools, which have undoubtedly improved work effectiveness through increasing the speed of work completion, reducing errors, reducing unnecessary costs, facilitating the work processes etc., firms should keep pace with the latest technologies or they will fall behind, which usually leads to the loss of competitive edge, failure and bankruptcy.

Firms may have recent and most advanced information technologies, multi-year strategic plans, detailed description of jobs, etc., but unless they hire, build, develop and retain adequate human resources, all of these tools have no significant impact on business outcomes. Therefore, it can be said that information technologies can be purchased and replicated, but without skilled people, information technologies are not sufficient for a firm to be successful and it would face constant challenges. In light of our results, it can be summarized that if information technologies are used properly in a business setting they will result in better performance of the firm.

Research results have confirmed the hypotheses set above. The information derived from this empirical research revealed many advantages of working with the SFA tools such as: sending online orders from sales representatives, access to current stock information at any time, easier registration of goods, facilitating the work process, financial reconciliation at any time, more effective way of working, better time management, increased level of supplier reliability, faster access to information, reduction of errors etc. As to the question of whether these firms managed to increase their work effectiveness through SFA tools, respondents from firms "X" and "Y" confirmed that they thought the goal had been achieved, while the respondent from firm "Z" believed that their effectiveness was at an appropriate level without using SFA tools. The impact of using SFA tools in the process of increasing work effectiveness and work reorganization

was measured through the introduction of SFA tools that resulted in: improved work effectiveness, shortened duration of work completion, reduced level of errors, accurate stock information in real time, financial reconciliation in real time, faster delivery of goods, real-time information, facilitated work process etc. Also, research results of this study indicated that SFA tools had affected sales increase and cost reduction. It should be emphasized that only 1.75 percent of the respondents thought that there had been no perceived contribution from the use of SFA tools.In addition, this is in interaction with the opinion of the representative of firm "Z", who did not perceive any shortcomings of a system working without an SFA system. But the feedback of this respondent on work processes in the respective firm without SFA tools indicated another shortcoming of this research: the fact that firm "Z" had not tested the SFA system and its effects.

It can be concluded that Kosovan FMCG wholesale distribution firms should invest in a specialized SFA system in order for the firms to operate with enhanced effectiveness and improved performance.

Based on the results of this empirical study, the following recommendations for Kosovan FMCG wholesale distribution firms are presented:

- Employees should be valued as human capital because it is the most important source of competitive advantage.
- SFA tools should be invested in, in order to achieve the multifold and diverse benefits mentioned above.
- Firm's image should be enhanced through proper investment in SFA tools.
- Work processes should be restructured as this reorganization of the work processes is necessary on the occasion of the introduction of SFA tools.
- Staff should receive preparation and training in IT by bringing in hardware and software experts.
- Application of PDAs should be enriched and enhanced in order to:
  - Enable sending online orders from direct sellers;
  - Be given the opportunity in the application to amend the bill in case of mistakes;
  - Register sales point with bar codes on PDAs;
  - Be given the option of printing the invoice after being scanned with a PDA;
  - Accelerate the synchronization of all applications and real time synchronization;
  - Add mapping applications;
  - Place route plans directly on the PDA;
  - Register inventory with expiration dates;
  - Keep longer clients' history in the PDA;

- Be given the option of returning the goods through PDAs and given the opportunity to insert comments (applicable to sales representatives);
- Increase the speed of work application and
- Keep accurate evidence in the real-time inventory.

Due to the fact that this research was based on three case studies of FMCG wholesale distribution firms in Kosovo, future research should have a widened scope in order to provide results that are indicative of a broader range of firms.

REFERENCES:

1. Alpar, P. & Kim, M. (1990). A microeconomic approach to the measurement of information technology value. *Journal of Management Information Systems*, *7*(2), 55-69.
2. Ahearne, M., Jelinek, R. & Rapp, A. (2005). Moving beyond the direct effect of SFA adoption on salesperson performance: Training and support as key moderating factors. *Industrial Marketing Management*, *34*(4), 379-388.
3. Bakos, J. Y. & Treacy, M. E. (1986). Information technology and corporate strategy: a research perspective. *MIS quarterly*, *10* (1986), 107-117.
4. Banker, R.D. and Kauffman, R.J. (1988). Strategic Contributions of Information Technology: An Empirical Study of ATM Networks, in *Proceedings of Ninth International Conference on Information Systems*, J. I. DeGross and M. H. Olson (eds.), Minneapolis, Minnesota,141-150.
5. Barker, R. M., Gohmann, S. F., Guan, J. & Faulds, D. J. (2009). Why is my sales force automation system failing?. *Business Horizons*, *52*(3), 233-241.
6. Barnes, S. J., Scornavacca, E. & Innes, D. (2006). Understanding wireless field force automation in trade services. *Industrial Management & Data Systems*, *106*(2), 172-181.
7. Barua, A., Kriebel, C. H. & Mukhopadhyay, T. (1995). Information technologies and business value: An analytic and empirical investigation. *Information systems research*, *6*(1), 3-23.
8. Bharadwaj, A. S. (2000). A resource-based perspective on information technology capability and firm performance: An empirical investigation. *MIS Quarterly*, *24*(1), 169-196.
9. Brown, S. P. & Jones, E. (2005). Introduction to the special issue: Advancing the field of selling and sales management. *Journal of Personal Selling & Sales Management*, *25*(2), 103-104.
10. Brynjolfsson, E. & Hitt, L. M. (2000). Beyond computation: Information technology, organizational transformation and business performance. *The Journal of Economic Perspectives*, *14*(4), 23-48.

11. Brynolfsson, E. & Saunders, A. (2010). *Wired for innovation: how information technology is reshaping the economy*. Cambridge, MA: MIT Press.

12. Cascio, R., Mariadoss, B. J. & Mouri, N. (2010). The impact of management commitment alignment on salespersons' adoption of sales force automation technologies: An empirical investigation. *Industrial Marketing Management*, *39*(7), 1088-1096.

13. Clemons, E. K. & Row, M. C. (1991). Sustaining IT advantage: the role of structural differences. *MIS Quarterly*, *15*(3), 275-292.

14. Coughlan, S. & Breslin, J. G. (2003). The application of modern PDA technology for effective handheld solutions in the retail industry. *Industrial Technology, IEEE International Conference on* 1, 411-415).

15. Daveri, F. (2000). *Is Growth an Information Technology Story in Europe Too?* (No. 2000-12). EPRU Working Paper Series. Universita di Parma, Parma, Italy.

16. Dedrick, J., Gurbaxani, V. & Kraemer, K. L. (2003). Information technology and economic performance: A critical review of the empirical evidence. *ACM Computing Surveys (CSUR)*, *35*(1), 1-28.

17. Devaraj, S. & Kohli, R. (2000). Information technology payoff in the health-care industry: a longitudinal study. *Journal of Management Information Systems*, *16*(4), 41-67.

18. Dewan, S. & Kraemer, K. L. (2000). Information technology and productivity: evidence from country-level data. *Management Science*, *46*(4), 548-562.

19. Dewett, T. & Jones, G. R. (2001). The role of information technology in the organization: a review, model, and assessment. *Journal of Management*, *27*(3), 313-346.

20. Engle, R. L. & Barnes, M. L. (2000). Sales force automation usage, effectiveness, and cost-benefit in Germany, England and the United States. *Journal of Business & Industrial Marketing*, *15*(4), 216-241.

21. Erffmeyer, R. C. & Johnson, D. A. (2001). An exploratory study of sales force automation practices: Expectations and realities. *Journal of Personal Selling & Sales Management*, *21*(2), 167-175.

22. Fafchamps, M., McKenzie, D., Quinn, S. & Woodruff, C. (2012). Using PDA consistency checks to increase the precision of profits and sales measurement in panels. *Journal of Development Economics*, *98*(1), 51-57.

23. Gohmann, S. F., Guan, J., Barker, R. M. & Faulds, D. J. (2005). Perceptions of sales force automation: Differences between sales force and management. *Industrial Marketing Management*, *34*(4), 337-343.

24. Golden, A. G. & Geisler, C. (2007). Work–life boundary management and the personal digital assistant. *Human Relations*, *60*(3), 519-551.

25. Henderson, J. C. & Venkatraman, N. (1993). Strategic alignment: Leveraging information technology for transforming organizations. *IBM systems journal*, *32*(1), 4-16.

26. Henderson, J. C. & Venkatraman, N. (1994). *Strategic alignment: a model for organizational transformation via information technology*, in T. J. Allen & M. S. Scott Morton (Eds.), Information technology and the corporation of the 1990s, 202–220. New York: Oxford University Press.

27. Holland, C., Lockett, G. & Blackman, I. (1992). Planning for electronic data interchange. *Strategic Management Journal*, *13*(7), 539-550.

28. Jarvenpaa, S. L. & Leidner, D. E. (1998). An information company in Mexico: Extending the resource-based view of the firm to a developing country context. *Information Systems Research*, *9*(4), 342-361.

29. Jones, E., Sundaram, S. & Chin, W. (2002). Factors leading to sales force automation use: A longitudinal analysis. *Journal of Personal Selling & Sales Management*, *22*(3), 145-156.

30. Kanaracus, C. (2008). Gartner: CRM market up 23 percent in '07. Webpage: www.pcworld.com
http://www.pcworld.com/article/148010/article.html, accessed 02/25/2016.

31. Keillor, B. D., Bashaw, R. E. & Pettijohn, C. E. (1997). Salesforce automation issues prior to implementation: the relationship between attitudes toward technology, experience and productivity. *Journal of Business & Industrial Marketing*, *12*(3/4), 209-219.

32. Kettinger, W. J., Grover, V., Segars, A. H. & Guha, S. (1994). Strategic information systems revisited: a study in sustainability and performance. *MIS Quarterly*, *18*(1), 31-58.

33. Kling, R. (1980). Social analyses of computing: Theoretical perspectives in recent empirical research. *ACM Computing Surveys (CSUR)*, *12*(1), 61-110.

34. Kraemer, K. L. & Dedrick, J. (2001). Information technology and productivity: Results and implications of cross-country studies, in M. Pohjola (Ed.), *Information Technology and Economic Development*. Cambridge: Oxford University Press. U.K, 257–279.

35. Kraemer, K. L. & Dedrick, J. (1994). Payoffs from investment in information technology: Lessons from the Asia-Pacific region. *World Development*, *22*(12), 1921-1931.

36. Loveman, G. W. (1994). An Assessment of the Productivity Impact of Information Technologies, in *Information Technology and the Corporation of the 1990s*: Research Studies. T. J. Allen and M. S. S. Morton, eds,. Oxford, Oxford University Press, 88-110.

37. Mathieu, J., Ahearne, M. & Taylor, S. R. (2007). A longitudinal cross-level model of leader and salesperson influences on sales force technology use and performance. *The Journal of applied psychology*, *92*(2), 528-537.

38. McAfee, A. (2002). The impact of enterprise information technology adoption on operational performance: An empirical investigation. *Production and operations management*, *11*(1), 33-53.

39. Morgan, A. J. & Inks, S. A. (2001). Technology and the sales force: Increasing acceptances of sales force automation. *Industrial Marketing Management*, *30*(5), 463-472.

40. Neo, B. S. (1988). Factors facilitating the use of information technology for competitive advantage: An exploratory study. *Information & Management*, *15*(4), 191-201.

41. Pohjola, M. (2001). Information technology and economic growth: A cross-country analysis. *In Information Technology and Economic Development*. M. Pohjola, Ed. Oxford University Press, Cambridge, U.K., 242–256.

42. Porter M.E, Millar V.E. (1985). How information gives you competitive advantage. *Harvard Business Review,* 63(4), 149–160.

43. Quan M. (2003). PDA market poised for growth after sluggish. Electronic Engineering Times, webpage: http://www.eetimes.com/document.asp?doc_id=1200251,accessed 10/03/2016.

44. Rackoff, N., Wiseman, C. & Ullrich, W. A. (1985). Information systems for competitive advantage: implementation of a planning process. *MIS quarterly*, 9, 285-294.

45. Rivers, L. M. & Dart, J. (1999). Sales Technology Applications: The acquisition and use of sales force automation by mid-sized manufacturers. *Journal of Personal Selling & Sales Management*, *19*(2), 59-73.

46. Robinson, L., Marshall, G. W. & Stamps, M. B. (2005). Sales force use of technology: antecedents to technology acceptance. *Journal of Business Research*, *58*(12), 1623-1631.

47. Rodina, E., Zeimpekis, V. & Fouskas, K. (2003). Remote workforce business process integration through real-time mobile communications. *Proceedings of the Second International Conference on Mobile Business*, Vienna, Austria.

48. Sabherwal, R. & King, W. R. (1991). Towards a theory of strategic use of information resources: an inductive approach. *Information & Management*, *20*(3), 191-212.

49. Santhanam, R. & Hartono, E. (2003). Issues in linking information technology capability to firm performance. *MIS Quarterly*, *27*(1), 125-153.

50. Schafer, S. (1997). Supercharged sell: Sales-force automation is a powerful tool but succeeding with it is no easy matter. Webpage: http://www.inc.com/magazine/19970615/1412.html, accessed 02/28/2016.

51. Scornavacca, E., Huff, S. L., Hoehle, H. & Sutherland, A. (2013). Perceptions of the Impact of Mobile Sales Force Automation on Salespeople's Performance. In I. Lee (Ed.), *Strategy, Adoption, and Competitive Advantage of Mobile Services in the Global Economy.* Hershey, PA: Information Science Reference. doi:10.4018/978-1-4666-1939-5, ch010, 189-202.

52. Siebel, T. M. & Malone, M. S. (1996). *Virtual selling: Going beyond the automated sales force to achieve total sales quality*. New York: The Free Press.

53. Speier, C. & Venkatesh, V. (2002). The hidden minefields in the adoption of sales force automation technologies. *Journal of Marketing*, *66*(3), 98-111.

54. Strassmann, P. A. (1990). *The business value of computers: An executive's guide*. Information Economics Press, Connectitut.

55. Subirana B., Eckes C., Herman G., Sarma S. & Barrett M. (2003). Measuring the Impact of Information Technology on Value and Productivity using a Process-Based Approach: The case for RFID Technologies. Research Paper *MIT Sloan* 4450-03. No. 223.

56. Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, *27*(3), 425-478.

57. Verity, J. W. (1993). Taking a Laptop on a Call. *Business Week*, 3342 (October 25), 124-125.

58. Wailgum, T. (2008). The future state of the CRM market, webpage: http://www.pcworld.com/article/148135/crm_future.html?page=2, accessed 01/20/2016.

59. Walker, B. & Barnes, S. J. (2005). Wireless sales force automation: concept and cases. *International Journal of Mobile Communications*, *3*(4), 411-427.

60. Wooldridge, B. & Floyd, S. W. (1990). The strategy process, middle management involvement, and organizational performance. *Strategic management journal*, *11*(3), 231-241.

61. Zahra, S. A. & Covin, J. G. (1993). Business strategy, technology policy and firm performance. *Strategic management journal*, *14*(6), 451-478.

62. Zigmund, G. William. (2000). *Business Research Methods*. Sixth Edition. The Dryden Press. Orlando, Florida, U.S.A

POBOLJŠANJE UČINKOVITOSTI PRODAVAČA U VELEPRODAJNIM TVRTKAMA PUTEM ALATA ZA AUTOMATIZACIJU PRODAJE

***Albana Berisha Qehaja*[4], *Enver Kutllovci*[5] & *Mihane Berisha Namani*[6]**

Sažetak

Glavna svrha ovog rada je doprinos raspravi o tome dolazi li do poboljšanja učinkovitosti prodavača kroz upotrebu alata za automatizaciju prodaje. Obavljeno je istraživanje na uzorku od tri lokalne tvrtke u Republici Kosovo, koje se bave distribucijom robe široke *potrošnje (FMCG, fast-moving consumer goods). Ispitano je 58 zaposlenika lokalnih tvrtki „X", „Y" i „Z". Ova je tema izabrana jer veleprodajne tvrtke koje se bave distribucijom robe* široke *potrošnje na Kosovu prolaze kroz tranziciju u pogledu upotrebe specijaliziranih informacijskih tehnologija poput dlanovnika (Personal Digital Assistant – PDA). Neke su tvrtke započele sa svakodnevnom upotrebom ovih naprednih tehnoloških alata ranije, dok su ih drugi prihvatili kasnije. Međutim, neke tvrtke još nisu napredovale niti odstupile od tradicionalnog pristupa. U radu se iznosi tvrdnja kako veleprodajne tvrtke u distribuciji robe* široke *potrošnje koje su prihvatile alate za automatizaciju prodaje, imaju učinkovitije prodajno osoblje u usporedbi s tvrtkama u kojima se upotrebljava tradicionalni pristup bez dlanovnika i sustava za praćenje vozila (eng. vehicle surveillance system). Rezultati empirijske studije u skladu su s trima hipotezama koje se iznose u radu.*

Ključne riječi: *učinkovitost prodavača, alati za automatizaciju prodaje, učinak, veleprodajna tvrtka, Kosovo.*

JEL klasifikacija: O14, O15, L22, L24, J24

[4] Albana Berisha Qehaja, doktorand, asistent, Ekonomski fakultet, Sveućilište u Prištini, E-mail: albana.berisha@uni-pr.edu

[5] Dr. sc. Enver Kutllovci, redovni profesor, Ekonomski fakultet, Sveučilište u Prištini, E-mail: enver.kutllovi@uni-pr.edu

[6] Dr. sc. Mihane Berisha Namani, redovni profesor, Ekonomski fakultet, Sveučilište u Prištini, E-mail: mihane.berisha@uni-pr.edu